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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 10/065,495 | 10/24/2002 | Ronald Scott Bunker | 839-1333 | 9074 |
| 30024 | 7590 | 03/24/2005 | EXAMINER | |
| NIXON & VANDERHYE P.C./G.E. 1100 N. GLEBE RD. SUITE 800 ARLINGTON, VA 22201 | | | RODRIGUEZ, WILLIAM H | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3746 | |

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|------------------------------|------------------------|----------------------|
| | 10/065,495 | BUNKER, RONALD SCOTT |
| Examiner | Art Unit | |
| William H. Rodriguez | 3746 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 06 January 2005.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-6 and 8-16 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) 9-16 is/are allowed.

6) Claim(s) 1,3 and 6 is/are rejected.

7) Claim(s) 2,4,5 and 8 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .

5) Notice of Informal Patent Application (PTO-152)

6) Other: ____ .

DETAILED ACTION

This office action is in response to the amendment and remarks filed 1/6/05. Since the examiner has applied new grounds of rejection, this office action is being made non-final to afford the applicant the opportunity to respond to the new grounds of rejection.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "1.5-4D" in line 2. There is insufficient antecedent basis for this limitation in the claim. The recitation "a diameter D" was first positively recited in claim 4, however, claim 6 does not depend from claim 4 but from claim 1 (which does not recite the limitation a diameter D). Appropriate correction is required.

Claim Rejections - 35 USC § 102

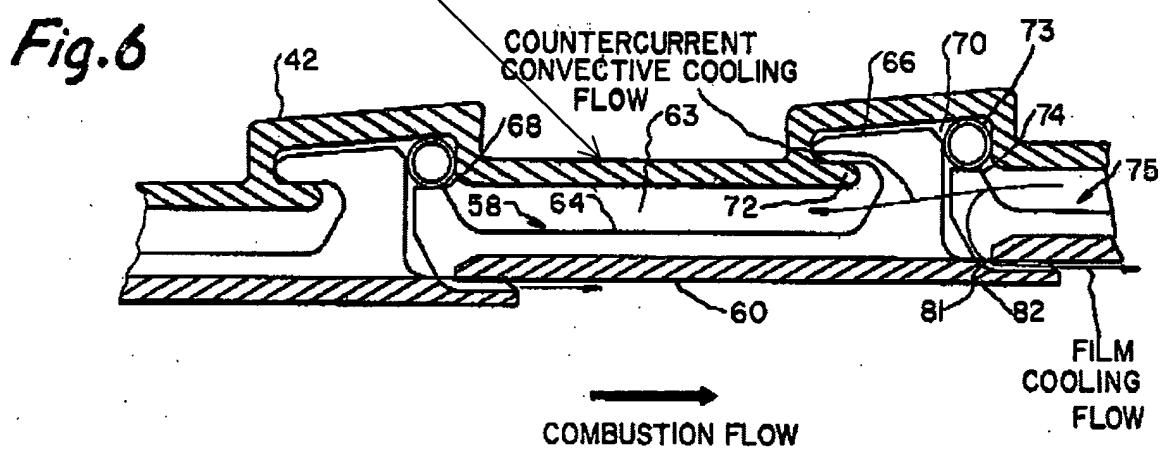
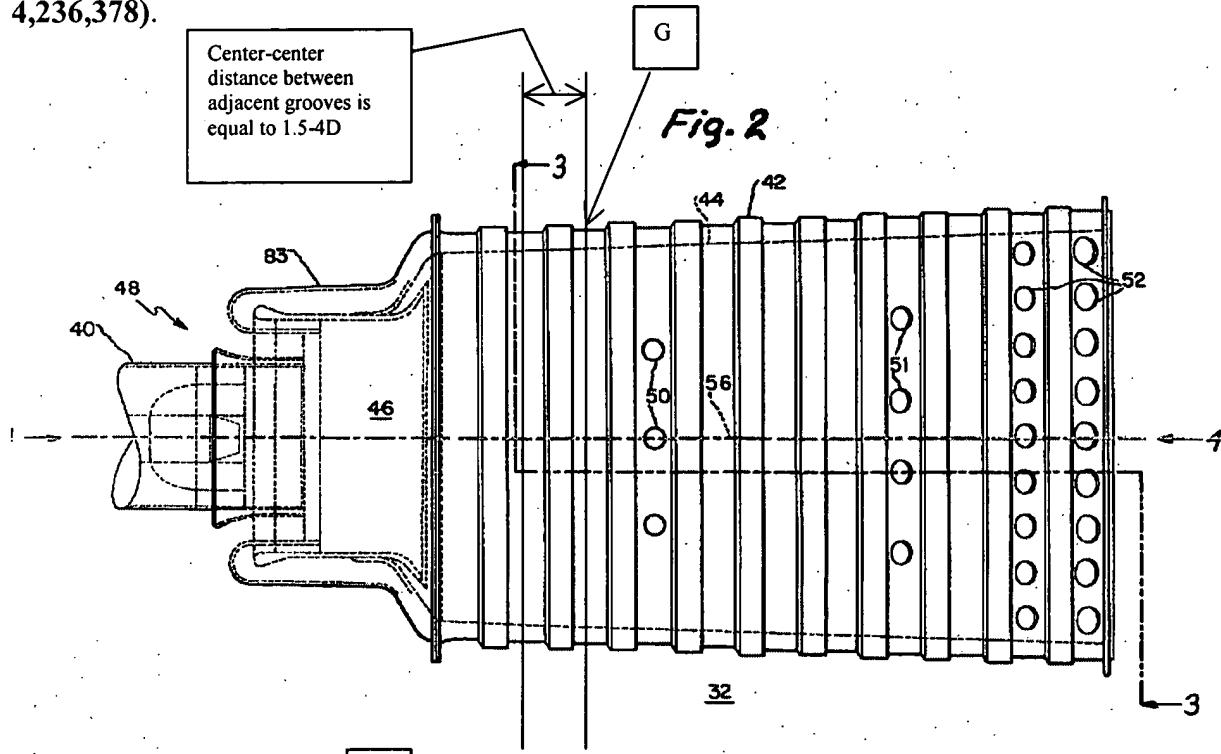
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by **Vogt** (US 4,236,378).



With respect to claim 1, **Vogt** teaches a combustor liner 42 for a gas turbine, the combustor liner 42 having a substantially cylindrical shape; and a plurality of axially spaced annular grooves G (column 3 lines 21-28; and column 4 lines 6-12) formed in an outside surface

of said combustor liner 42, each groove G having a uniform cross-section and extending continuously about a circumference of said liner. See particularly **Figures 2, 4, 5 and 6** of Vogt.

With respect to claim 3, **Vogt** teaches that said grooves G are arranged transversely to a direction of a cooling air flow. See particularly **Figures 2, 4, 5 and 6** of Vogt.

With respect to claim 6, **Vogt** teaches that a center-to-center distance between adjacent grooves is equal to 1.5-4D. See particularly **Figure 2** of Vogt above.

Allowable Subject Matter

5. Claims 9-16 are allowed.
6. Claims 2, 4, 5 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 3 and 6 have been considered but are moot in view of the new ground(s) of rejection. See rejection above.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodriguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William H. Rodriguez
Examiner
Art Unit 3746